

Amendments to the Claims

Claims 1 - 6 (canceled)

1 Claim 7 (original): A computer program product for improving performance and resource  
2 utilization of software applications that interact with a back-end data source to update information  
3 stored therein, the computer program product embodied on one or more computer-readable media  
4 and comprising:

5 computer-readable program code means for storing one or more objects in a cache for  
6 responding to update requests against the objects, wherein (1) a set of input properties is stored with  
7 or associated with each stored object and (2) update logic specifying how to update each of the  
8 stored objects is stored with or associated with the stored object or a group of stored objects;

9 computer-readable program code means for receiving update requests against one or more of  
10 the objects;

11 computer-readable program code means for determining an update mode to use for a  
12 selected update request, responsive to the computer-readable program code means for receiving;

13 computer-readable program code means for immediately processing the selected update  
14 request if the determined update mode is not a delayed update mode; and

15 computer-readable program code means for delaying processing of the selected update  
16 request otherwise.

1 Claim 8 (original): The computer program product according to Claim 7, wherein the computer-  
2 readable program code means for delaying processing further comprises:

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3 computer-readable program code means for queuing the selected update request, along with  
4 the input properties and values thereof which are to be used for performing the selected update  
5 request, as a queued update request on an update queue;

6 computer-readable program code means for detecting a triggering event for performing the  
7 delayed processing of the queued update requests; and

8 computer-readable program code means for performing, responsive to the computer-readable  
9 program code means for detecting, the queued update requests.

1 Claim 9 (original): The computer program product according to Claim 8, wherein the computer-  
2 readable program code means for performing further comprises:

3 computer-readable program code means for setting the input properties of a selected object  
4 against which the queued update request is to be performed using the queued input property values;  
5 and

6 computer-readable program code means for executing the update logic stored with or  
7 associated with the selected object.

1 Claim 10 (original): The computer program product according to Claim 8, wherein the triggering  
2 event comprises reaching a particular count of queued update requests for a selected object.

1 Claim 11 (original): The computer program product according to Claim 8, wherein the triggering  
2 event comprises reaching a particular time of day.

1 Claim 12 (currently amended): The computer program product according to Claim 8, wherein the  
2 ~~update policy triggering event~~ comprises information about an associated object which is used for  
3 responding to read requests.

1 Claim 13 (original): The computer program product according to Claim 8, wherein a separate  
2 update queue is created for each of one or more back-end data sources to be accessed during  
3 operation of the computer-readable program code means for performing.

1 Claim 14 (original): The computer program product according to Claim 7, wherein the computer-  
2 readable program code means for determining further comprises computer-readable program code  
3 means for selecting the delayed update mode based upon a time of day when the selected update  
4 request is received.

1 Claim 15 (original): The computer program product according to Claim 7, wherein the computer-  
2 readable program code means for determining further comprises computer-readable program code  
3 means for selecting the delayed update mode based upon a classification of a user making the  
4 selected update request.

1 Claim 16 (original): The computer program product according to Claim 8, further comprising:  
2 computer-readable program code means for connecting to the back-end data source prior to  
3 operation of the computer-readable program code means for performing; and  
4 computer-readable program code means for disconnecting from the back-end data source

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5 after operation of the computer-readable program code means for performing.

Claims 17 - 22 (canceled)

1 Claim 23 (original): A system for improving performance and resource utilization of software  
2 applications that interact with a back-end data source to update information stored therein,  
3 comprising:

4 means for storing one or more objects in a cache for responding to update requests against  
5 the objects, wherein (1) a set of input properties is stored with or associated with each stored object  
6 and (2) update logic specifying how to update each of the stored objects is stored with or associated  
7 with the stored object or a group of stored objects;

8 means for receiving update requests against one or more of the objects;

9 means for determining an update mode to use for a selected update request, responsive to the  
10 means for receiving;

11 means for immediately processing the selected update request if the determined update mode  
12 is not a delayed update mode; and

13 means for delaying processing of the selected update request otherwise.

1 Claim 24 (original): The system according to Claim 23, wherein the means for delaying processing  
2 further comprises:

3 means for queuing the selected update request, along with the input properties and values  
4 thereof which are to be used for performing the selected update request, as a queued update request

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- 5 on an update queue;
- 6 means for detecting a triggering event for performing the delayed processing of the queued
- 7 update requests; and
- 8 means for performing, responsive to the means for detecting, the queued update requests.

1 Claim 25 (original): The system according to Claim 24, wherein the means for performing further

2 comprises:

- 3 means for setting the input properties of a selected object against which the queued update
- 4 request is to be performed using the queued input property values; and
- 5 means for executing the update logic stored with or associated with the selected object.

1 Claim 26 (original): The system according to Claim 24, wherein the triggering event comprises

2 reaching a particular count of queued update requests for a selected object.

1 Claim 27 (original): The system according to Claim 24, wherein the triggering event comprises

2 reaching a particular time of day.

1 Claim 28 (currently amended): The system according to Claim 24, wherein the ~~update policy~~

2 triggering event comprises information about an associated object which is used for responding to

3 read requests.

1 Claim 29 (original): The system according to Claim 24, wherein a separate update queue is created

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2 for each of one or more back-end data sources to be accessed during operation of the means for  
3 performing.

1 Claim 30 (original): The system according to Claim 23, wherein the means for determining further  
2 comprises means for selecting the delayed update mode based upon a time of day when the selected  
3 update request is received.

1 Claim 31 (original): The system according to Claim 23, wherein the means for determining further  
2 comprises means for selecting the delayed update mode based upon a classification of a user making  
3 the selected update request.

1 Claim 32 (original): The system according to Claim 24, further comprising:  
2 means for connecting to the back-end data source prior to operation of the means for  
3 performing; and  
4 means for disconnecting from the back-end data source after operation of the means for  
5 performing.

Claims 33 - 38 (canceled)

1 Claim 39 (original): A method for improving performance and resource utilization of software  
2 applications that interact with a back-end data source to update information stored therein,  
3 comprising the steps of:

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4 storing one or more objects in a cache for responding to update requests against the objects,  
5 wherein (1) a set of input properties is stored with or associated with each stored object and (2)  
6 update logic specifying how to update each of the stored objects is stored with or associated with the  
7 stored object or a group of stored objects;

8 receiving update requests against one or more of the objects;

9 determining an update mode to use for a selected update request, responsive to the receiving  
10 step;

11 immediately processing the selected update request if the determined update mode is not a  
12 delayed update mode; and

13 delaying processing of the selected update request otherwise.

1 Claim 40 (original): The method according to Claim 39, wherein the step of delaying processing  
2 further comprises the steps of:

3 queuing the selected update request, along with the input properties and values thereof which  
4 are to be used for performing the selected update request, as a queued update request on an update  
5 queue;

6 detecting a triggering event for performing the delayed processing of the queued update  
7 requests; and

8 performing, responsive to the detecting step, the queued update requests.

1 Claim 41 (original): The method according to Claim 40, wherein the performing step further  
2 comprises the steps of:

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3           setting the input properties of a selected object against which the queued update request is to  
4   be performed using the queued input property values; and  
5           executing the update logic stored with or associated with the selected object.

1   Claim 42 (original): The method according to Claim 40, wherein the triggering event comprises  
2   reaching a particular count of queued update requests for a selected object.

1   Claim 43 (original): The method according to Claim 40, wherein the triggering event comprises  
2   reaching a particular time of day.

1   Claim 44 (currently amended): The method according to Claim 40, wherein the update policy  
2   triggering event comprises information about an associated object which is used for responding to  
3   read requests.

1   Claim 45 (original): The method according to Claim 40, wherein a separate update queue is created  
2   for each of one or more back-end data sources to be accessed during operation of the step of  
3   performing.

1   Claim 46 (original): The method according to Claim 39, wherein the determining step further  
2   comprises the step of selecting the delayed update mode based upon a time of day when the selected  
3   update request is received.



1 Claim 47 (original): The method according to Claim 39, wherein the determining step further  
2 comprises the step of selecting the delayed update mode based upon a classification of a user  
3 making the selected update request.

1 Claim 48 (original): The method according to Claim 40, further comprising the steps of:  
2 connecting to the back-end data source prior to operation of the performing step; and  
3 disconnecting from the back-end data source after operation of the performing step.